RATE PR – AVOIDED COSTS METHODOLOGY

METHODOLOGY FOR DETERMINING AVOIDED COSTS FOR POWER PURCHASE AGREEMENTS WITH SMALL POWER PRODUCERS UNDER THE PURPA AND S.C. ACT NO. 62 OF 2019

AVAILABILITY

This tariff sets forth the methodology approved by the Public Service Commission of South Carolina in Docket No. 2019-184-E for computing the avoided energy and capacity costs associated with Power Purchase Agreements ("PPA") provided under the provisions of S.C. Code Ann. § 58-41-20 and the Public Utility Regulatory Policies Act ("PURPA").

A. Methodology for Determining Avoided Costs

1. **Methodology.** A Difference in Revenue Requirements ("DRR") methodology is used to calculate both the energy component and the capacity component of its avoided costs by comparing a base case and a change case.

2. **Avoided Energy Costs – Base Case**. The base case for determining avoided energy costs is defined by DESC's existing fleet of generators and the hourly load profile to be served by these generators, including the solar facilities with which DESC has executed a PPA and the solar facilities that have executed a Notice of Commitment ("NOC").

3. **Avoided Energy Costs – Change Case**. The change case for determining avoided energy costs is the same as the base case with the addition of a zero-cost purchase transaction modeled after the appropriate energy profile for the resource under consideration and, in the case for solar, the addition of increased operating reserves. The base and change cases are identical except for the zero-cost purchase transaction and, in the case for solar, additional operating reserves.

4. **Avoided Energy Cost – As Determined**. The avoided energy cost equals the difference between the base case costs and the change case costs.

5. **Avoided Capacity Cost – Base Case**. The base case for determining avoided capacity cost is the resource plan for meeting DESC's system load reflecting the future capacity resource additions that the generating resource under consideration would be most likely to displace.

6. **Avoided Capacity Cost – Change Case**. The change case for determining avoided capacity costs is the same as the base case with the addition of a zero-cost purchase transaction reflecting the size and profile of the resource under consideration (or for the Standard Offer Contract and PR-1, 100 MW). The base and change cases are identical except for the zero-cost purchase transaction.

7. **Avoided Capacity Cost – As Determined**. The avoided capacity cost equals the difference between the incremental capacity costs in the base resource case and the change case. The levelized change in revenue requirements may be stated as either a $/kW or a $/kWh credit and may be paid during the specific time periods in which the avoided capacity cost is realized.

8. **Characteristics and Profile of the Generation Source**. The Change Case for both energy and capacity reflects the characteristics and profile of the generation source proposed (e.g., solar, wind, battery, and biomass). The profile used will reasonably reflect the resource being proposed.

B. Elements of Avoided Cost

The final avoided cost calculation shall reflect consideration of the following factors, some of which may have a zero or negative value.

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	Components
1	Avoided Energy Costs
2	Avoided Capacity Costs
3	Ancillary Services
4	Transmission & Distribution Capacity
5	Utility Integration & Interconnection Costs
6	Utility Administration Costs
7	Variable Environmental Costs
8	Other Locational Cost or Benefits
9	Line Losses
10	Other Costs
11	**Total Value of New Resource**

1. **Avoided Energy Costs**. The avoided energy costs calculated using the DRR are adjusted to remove the cost of criteria pollutants and environmental costs.

2. **Avoided Capacity Costs.** The avoided capacity cost, if any, calculated using the DRR.

3. **Ancillary Services** The cost or value of ancillary services reflect the Company's engineering assessment of those attributes. The Company's current assessment of those attributes indicates that such costs or benefits if any will be project specific but not generic to renewable generating resources and thus not included in the DRR analysis.

4. **Transmission & Distribution Capacity.** To the extent that transmission capacity is avoided it will be determined based on engineering assessments and will be captured here.

5. **Utility Integration & Interconnection Costs.** Incremental utility integration and interconnection costs associated with the resource under consideration, if any, apart from those paid directly by the generation owner, based on engineering assessments.

6. **Utility Administration Costs.** Any incremental administrative costs associated with the additional resource as determined by the utility.

7. **Variable Environmental Costs.** Variable environmental compliance costs reflect the market cost of lime and other catalysts and of SO_2 and NO_x emission allowances. CO_2 emission costs will be included in the model at such time as those costs are imposed on DESC.

8. **Line Loses**. The cumulative marginal line losses avoided associated with delivering power across the system

9. **Other Locational Considerations.** Other locational considerations will be evaluated based on engineering analysis on a project by project basis. To the extent that distribution capacity is avoided it will be determined based on engineering assessments and will be captured here.

10. **Other Costs.** To the extent that other costs are identified through engineering analysis or operating experience, they will be quantified and reflected in the calculation.

C. Updates

The Company may update these factors and analyses from time to time as more current information and data become available.